

There are  $n$  children standing in a line. Each child is assigned a rating value given in the integer array ratings.

You are giving candies to these children subjected to the following requirements:

- Each child must have at least one candy.
- Children with a higher rating get more candies than their neighbors.

Return *the minimum number of candies you need to have to distribute the candies to the children.*

**Example 1:**

**Input:** ratings = [1,0,2]

**Output:** 5

**Explanation:** You can allocate to the first, second and third child with 2, 1, 2 candies respectively.

**Example 2:**

**Input:** ratings = [1,2,2]

**Output:** 4

**Explanation:** You can allocate to the first, second and third child with 1, 2, 1 candies respectively.

The third child gets 1 candy because it satisfies the above two conditions.

**Constraints:**

- $n == \text{ratings.length}$
- $1 \leq n \leq 2 * 10^4$
- $0 \leq \text{ratings}[i] \leq 2 * 10^4$